

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2. (Canceled)

3. (Currently Amended): A composition consisting of isolated pluripotent adult stem cells obtained from an exocrine glandular tissue of a salivary gland, a lacrimal gland, a sudoriferous gland, a sebaceous gland and/or gastrointestinal tissue, wherein the exocrine glandular tissue originates from a mammal, wherein the process for producing the isolated pluripotent adult stem cells comprises:

removal of exocrine glandular tissue;

the tissue thus removed is divided in such a gentle way that cell structures in resulting tissue fragments are largely preserved;

the divided tissue is cultured in a culture medium that does not contain any additional growth factors or differentiation factors, whereby most of the differentiated cells become detached from the stem cells, whereupon the stem cells adhere on a bottom of a tissue culture vessel;

the remaining tissue and nonadherent differentiated cells are largely separated by a first change of medium and the remaining nonadherent cells are separated by additional changes of medium at intervals of about 2 to 3 days; and

isolating the pluripotent adult stem cells,

and further wherein the isolated pluripotent adult stem cells are capable of differentiating into cell types of all three germ layers in a culture medium that does not contain any additional growth factors or differentiation factors after culturing under spatial conditions which ensure three dimensional contact of the cells.

4. (Canceled)

5. (Previously Presented): The composition according to Claim 3, wherein the exocrine glandular tissue is acinar tissue.

6. (Previously Presented): The composition according to Claim 5, wherein the acinar tissue is derived from the pancreas, the parotid gland or the mandibular gland.

7. (Previously Presented): The composition according to Claim 3, being capable of

forming organoid bodies.

8. (Canceled)

9. (Previously Presented): The composition according to Claim 3, wherein even after freezing/cryopreservation, the cells still retain an ability for self-renewal and unlimited division and do not differentiate.

10. (Previously Presented): A stem cell culture consisting of the composition according to Claim 3 in a culture medium adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

11. (Previously Presented): The stem cell culture according to Claim 10, wherein the culture medium does not include any feeder cell layer.

12. (Previously Presented): The stem cell culture according to Claim 10, wherein the cells retain an ability for self-renewal and unlimited division for more than 25 passages.

13. (Previously Presented): The stem cell culture according to Claim 12, wherein the cells retain the ability for self-renewal and unlimited division for more than 50 passages.

14. (Withdrawn): A primary stem cell culture obtained from exocrine glandular tissue, wherein the exocrine glandular tissue is obtained from a salivary gland, a lacrimal gland, a sudoriferous gland and/or a sebaceous gland of a mammal and a majority of living cells present in the culture are undifferentiated pluripotent adult stem cells.

Claims 15-47. (Canceled).

48. (Withdrawn): A composition comprising isolated pluripotent adult stem cells obtained from an exocrine glandular tissue of a salivary gland, a lacrimal gland, a sudoriferous gland, and/or a sebaceous gland, wherein the exocrine glandular tissue originates from a mammal.

49. (Withdrawn): A stem cell culture comprising the composition according to Claim 48 in a culture medium adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

50. (Withdrawn): A stem cell culture consisting essentially of the composition according to Claim 48 in a culture medium adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

51. (Previously Presented): A primary stem cell culture obtained from exocrine glandular

tissue from a salivary gland, a lacrimal gland, a sudoriferous gland, a sebaceous gland and/or gastrointestinal tissue of a mammal, wherein living cells from the exocrine glandular tissue present in the culture consist essentially of undifferentiated pluripotent adult stem cells.

52. (Previously Presented): The primary stem cell culture according to Claim 51, wherein the living cells present in the culture consist of undifferentiated pluripotent adult stem cells.

53. (Previously Presented): The primary stem cell culture according to Claim 51, wherein the exocrine glandular tissue is acinar tissue.

54. (Previously Presented): The primary stem cell culture according to Claim 53, wherein the acinar tissue is derived from the pancreas, the parotid gland or the mandibular gland.

55. (Previously Presented): The primary stem cell culture according to Claim 51, adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

56. (Previously Presented): The primary stem cell culture according to Claim 51, wherein the mammal is a primate or a rodent.

57. (Previously Presented) The primary stem cell culture according to Claim 51, wherein the mammal is a human.

58. (Previously Presented): The primary stem cell culture according to Claim 51, wherein the mammal is a rat.

59. (Previously Presented): The composition according to Claim 3, wherein the mammal is a primate or a rodent.

60. (Previously Presented): The composition according to Claim 3, wherein the mammal is a human.

61. (Previously Presented): The composition according to Claim 3, wherein the mammal is a rat.

62. (Currently Amended): A composition consisting of isolated adult stem cells which are capable of differentiating into cells of all three germ cell layers, wherein the adult stem cells are obtained from an exocrine glandular tissue of a salivary gland, a lacrimal gland, a sudoriferous gland, a sebaceous gland and/or gastrointestinal tissue, wherein the exocrine glandular tissue originates from a mammal, wherein the process for producing the isolated pluripotent adult stem cells comprises:
removal of exocrine glandular tissue;

the tissue thus removed is divided in such a gentle way that cell structures in resulting tissue fragments are largely preserved;
the divided tissue is cultured in a culture medium that does not contain any additional growth factors or differentiation factors, whereby most of the differentiated cells become detached from the stem cells, whereupon the stem cells adhere on a bottom of a tissue culture vessel;
the remaining tissue and nonadherent differentiated cells are largely separated by a first change of medium and the remaining nonadherent cells are separated by additional changes of medium at intervals of about 2 to 3 days; and

isolating the pluripotent adult stem cells,

and further wherein the isolated pluripotent adult stem cells are capable of differentiating into cell types of all three germ layers in a culture medium that does not contain any additional growth factors or differentiation factors after culturing under spatial conditions which ensure three dimensional contact of the cells.

63. (Previously Presented): The composition according to Claim 62, wherein the exocrine glandular tissue is acinar tissue.

64. (Previously Presented): The composition according to Claim 63, wherein the acinar tissue is derived from the pancreas, the parotid gland or the mandibular gland.

65. (Previously Presented): The composition according to Claim 62, being capable of forming organoid bodies.

66. (Canceled)

67. (Previously Presented): The composition according to Claim 62, wherein even after freezing/cryopreservation, the cells still retain an ability for self-renewal and unlimited division and do not differentiate.

68. (Previously Presented): A stem cell culture consisting of the composition according to Claim 62 in a culture medium adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

69. (Previously Presented): The stem cell culture according to Claim 68, wherein the culture medium does not include any feeder cell layer.

70. (Previously Presented): The stem cell culture according to Claim 68, wherein the cells retain an ability for self-renewal and unlimited division for more than 25 passages.

71. (Previously Presented): The stem cell culture according to Claim 70, wherein the cells retain the ability for self-renewal and unlimited division for more than 50 passages.

72. (Withdrawn): A primary stem cell culture obtained from exocrine glandular tissue, wherein the exocrine glandular tissue is obtained from a salivary gland, a lacrimal gland, a sudoriferous gland and/or a sebaceous gland of a mammal and a majority of living cells present in the culture are undifferentiated adult stem cells which are capable of differentiating into cells of all three germ cell layers.

73. (Withdrawn): A composition comprising isolated adult stem cells which are capable of differentiating into cells of all three germ cell layers, wherein the adult stem cells are obtained from an exocrine glandular tissue of a salivary gland, a lacrimal gland, a sudoriferous gland, and/or a sebaceous gland, wherein the exocrine glandular tissue originates from a mammal.

74. (Withdrawn): A stem cell culture comprising the composition according to Claim 73 in a culture medium adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

75. (Withdrawn): A stem cell culture consisting essentially of the composition according to Claim 73 in a culture medium adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

76. (Currently Amended): A primary stem cell culture obtained from exocrine glandular tissue from a salivary gland, a lacrimal gland, a sudoriferous gland, a sebaceous gland and/or gastrointestinal tissue of a mammal, wherein living cells from the exocrine glandular tissue present in the culture consist essentially of undifferentiated adult stem cells which are capable of differentiating into cells of all three germ cell layers, wherein the process for producing the isolated pluripotent adult stem cells comprises:
removal of exocrine glandular tissue;
the tissue thus removed is divided in such a gentle way that cell structures in resulting tissue fragments are largely preserved;
the divided tissue is cultured in a culture medium that does not contain any additional growth factors or differentiation factors, whereby most of the differentiated cells become detached from the stem cells, whereupon the stem cells adhere on a bottom of a tissue culture vessel;
the remaining tissue and nonadherent differentiated cells are largely separated by a first change

of medium and the remaining nonadherent cells are separated by additional changes of medium at intervals of about 2 to 3 days; and

isolating the pluripotent adult stem cells,

and further wherein the isolated pluripotent adult stem cells are capable of differentiating into cell types of all three germ layers in a culture medium that does not contain any additional growth factors or differentiation factors after culturing under spatial conditions which ensure three dimensional contact of the cells.

77. (Previously Presented): The primary stem cell culture according to Claim 76, wherein the living cells present in the culture consist of undifferentiated adult stem cells which are capable of differentiating into cells of all three germ cell layers.

78. (Previously Presented): The primary stem cell culture according to Claim 76, wherein the exocrine glandular tissue is acinar tissue.

79. (Previously Presented): The primary stem cell culture according to Claim 78, wherein the acinar tissue is derived from the pancreas, the parotid gland or the mandibular gland.

80. (Previously Presented): The primary stem cell culture according to Claim 76, adapted to allow stable maintenance and proliferation of the cells essentially without differentiation.

81. (Previously Presented): The primary stem cell culture according to Claim 76, wherein the mammal is a primate or a rodent.

82. (Previously Presented): The primary stem cell culture according to Claim 76, wherein the mammal is a human.

83. (Previously Presented): The primary stem cell culture according to Claim 76, wherein the mammal is a rat.

84. (Previously Presented): The composition according to Claim 62, wherein the mammal is a primate or a rodent.

85. (Previously Presented): The composition according to Claim 62, wherein the mammal is a human.

86. (Previously Presented): The composition according to Claim 62, wherein the mammal is a rat.